What is claimed is:

1. A thermal development apparatus comprising:

a heating section, which has at least a portion of its outer surface formed in an arc shape and has a smooth layer on outermost surface of the arc-shaped portion, for carrying photothermographic imaging material being in contact with the smooth layer on the arc-shaped portion while heating the photothermographic imaging material; and

a plurality of opposed rollers, arranged along a carrying path of the photothermographic imaging material carried by the smooth layer on the arc-shaped portion of the heating section, for pressing the photothermographic imaging material against the arc-shaped portion,

wherein following formula and relations

$P = 2\pi R\alpha/360$,

$2r + 3 \geqq P > 2r$, and

$\beta \leqq 60$

are satisfied when R (mm) denotes a radius of the arc-shaped portion, r (mm) denotes a radius of the opposed rollers, α (degree) denotes an angle between lines respectively connecting a center of the arc-shaped portion and centers of the two opposed rollers adjacent to each other, P (mm) denotes a pitch of the opposed rollers, and β (degree) denotes a contact angle of the photothermographic imaging material to the opposed roller.

2. The thermal development apparatus of claim 1; wherein the heating section comprises:

a base body;

an elastic layer arranged around the base body and made of an elastic member having thermal conductivity equal to or higher than 0.5W/k and JIS-A stiffness ranging from 20 degrees to 70 degrees; and

the smooth layer formed on the outer surface of the elastic layer and coated with fluororesin.

3. The thermal development apparatus of claim 1; wherein a nipping force of each opposed roller in pressing the photothermographic imaging material to the smooth layer of the heating section ranges from 0.06N/cm to 1N/cm.

4. The thermal development apparatus of claim 1; wherein a thickness of the smooth layer of the heating section ranges from 10μm to 100μm.

5. The thermal development apparatus of claim 1; wherein the opposed rollers are supported together by a supporting member, and a position of the supporting member is adjustable relatively to the arc-shaped portion of the heating section.

6. A thermal development apparatus comprising:

a heating section, having a predetermined curvature, for heating photothermographic imaging material; and

a plurality of opposed rollers arranged along an axial line of the heating section so as to press the photothermographic imaging material to the heating section, the photothermographic imaging material being developed while being carried between the heating section and each opposed roller,

wherein the heating section comprises:

a base body having the predetermined curvature;

an elastic layer arranged around the base body; and

a smooth layer arranged on an outer surface of the elastic layer,

and wherein parallelism between each opposed roller and the heating section is adjusted within a predetermined amount so that each departure of the opposed rollers from an outer surface of the heating section is kept equal to or lower than a predetermined value.

7. The thermal development apparatus of claim 6; wherein the smooth layer of the heating section is made of fluororesin.

8. The thermal development apparatus of claim 6; wherein a nipping force of each opposed roller in pressing the photothermographic imaging material to the heating

section ranges from 0.06N/cm to 1N/cm.

9. The thermal development apparatus of claim 6; wherein a film thickness of the smooth layer ranges from 10 μm to 100 μm.

10. The thermal development apparatus of claim 6; wherein the opposed rollers are supported together by a supporting member, and a position of the supporting member is adjustable relatively to the heating section.

11. The thermal development apparatus of claim 6; wherein the predetermined value of the departure is equal to or lower than 10 μm when a film thickness of the smooth layer is equal to 100 μm.

12. The thermal development apparatus of claim 6; wherein the predetermined value of the departure is equal to or lower than 14 μm when a film thickness of the smooth layer is equal to 50 μm.

13. The thermal development apparatus of claim 6; wherein the predetermined value of the departure is equal to or lower than 18 μm when a film thickness of the smooth layer is equal to 30 μm.